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Contents

You're Part of the Tradition

In a sport rich in tradition, Leupold® has earned its place as one of the classic names in hunting and shooting. To be sure, the Golden Ring® scope you now own is the finest example of Leupold heritage.

Frederick Leupold came to Portland, Oregon, from Germany in 1907, and quickly established a firm to manufacture and repair surveying transits. Fred's son, Marcus, broadened the company's focus in the late 1930s after the avid outdoorsman missed a buck on the soggy western slopes of Oregon's Cascade Range. (His scope had fogged, as was common for scopes of that era.) Frustrated by the experience, Marcus set out to build a better scope. The rest, as they say, is history.

Marcus Leupold's quest for quality has continued on to the present. In the words of the firm's founder, Frederick Leupold, "We solemnly promise never to let down on quality; the customer is entitled to a square deal." This is why we build every Leupold Golden Ring product to be worthy of the Leupold Full Lifetime Guarantee. It's the best customer protection in the business, and it's the best way we know to thank you for buying Leupold.

Know Your Scope

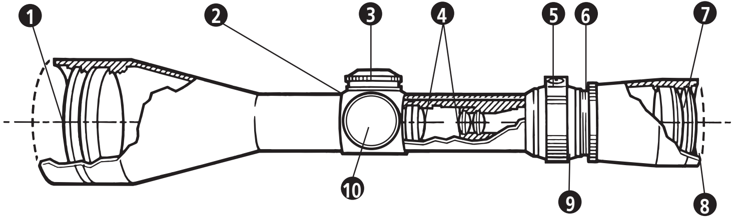
PARTS OF THE SCOPE

Riflescopes have become far more sophisticated over the years, but the four most basic parts have remained the same. Working from front to back they are:

1. The objective lens (or front lens) is critical to a superior sight picture.
2. The internal erector lenses which right the image.
3. The reticle, often referred to as the crosshair, provides the aiming point.
4. The ocular lens (or eyepiece lens) works with the other lenses to magnify the image, provide correct eye relief, and make diopter corrections.

HOW SCOPES WORK

As light passes through and beyond the objective lens, the resulting upside down image is sent to the internal lenses. Known as erector lenses, these internal lenses return the image to a right-side-up position. Finally, the ocular lens makes a final enlargement of that image and sends it on to your eye. Your Leupold scope was designed, manufactured, and tested to ensure that, when properly **mounted and sighted-in on your firearm, you will enjoy** exceptional performance. A solid mount is critical to satisfactory performance of your scope. If you have problems or questions, please contact Leupold Product Service (see page 39).



1	*Objective Lens*	4	*Erector Lenses*	8	*Eyepiece Assembly*
2	*Windage Adjustment (opposite side of scope)*	5	*Power Selector Ring*	9	*Reticle Housing*
3	*Elevation Adjustment*	6	*Eyepiece Lock Ring*	10	*Side Parallax Adjustment*
		7	*Ocular Lens*		

How to Install the Scope

PLEASE READ THIS ENTIRE HANDBOOK BEFORE MOUNTING YOUR SCOPE.

CAUTION

Always check and be certain that the firearm is unloaded before undertaking any work upon it.

THE LOWER THE SCOPE, THE BETTER

A scope mounted close to the rifle ensures proper cheek weld on the stock for a stable firing position and allows for rapid target acquisition. We recommend using the lowest possible ring height. No specific clearance is required, but the scope must clear the bolt handle, hammer (on lever actions and handguns), sights, and barrel.

When installed, be sure that your scope does not interfere with firearm operation and does not contact anything except the mount rings.

INSTALLING THE BASE, RINGS, AND SCOPE

Please refer to the instructions included with the base and rings for their proper installation on the firearm.

If necessary, it is safe to position the rear mount ring directly on the exposed threaded area near the eyepiece, but only after focusing the eyepiece. This allows a more forward placement of the scope. See page 8 for more details.

NOTE: *The windage and elevation adjustments on new Leupold scopes are centered as part of the assembly process. If you are mounting a scope that was previously mounted on another rifle, you should center the adjustments (please see "Zeroing Windage and Elevation Adjustments" on page 20 for more details).*

NOTE: *Use care in mounting the 2.5x28mm Scout riflescope. It is necessary to place the back edge of the rearmost ring at least 3/4" forward of the ocular bell/tube juncture to avoid possible reticle damage. Because of the longer eye relief of this product, mounting the scope back slightly will not in any way impair its function or effectiveness.*

ESTABLISHING EYE RELIEF ON RIFLES AND SHOTGUNS

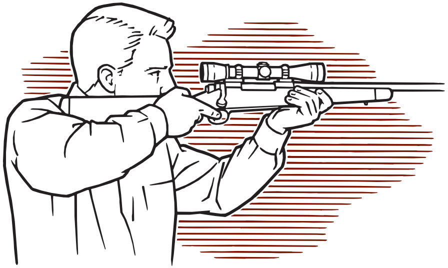
Because of the safety considerations associated with proper eye relief, Leupold strongly recommends that you mount your scope as far forward as possible. Beyond that, follow these steps:

1. With the scope as far forward in the mounts as possible, hold the rifle in your normal shooting position. (Variable power scopes should be set at the highest magnification for this process.)
2. Slowly move the scope to the rear just until you can see a full field-of-view.
3. Position your scope here for maximum eye relief.
4. Proceed to COMPLETING THE INSTALLATION.

NOTE: *To confirm that your scope is mounted in the best possible position, try assuming various positions: kneeling, seated, prone, and aiming both uphill and downhill. Remember that aiming uphill typically reduces eye relief. Wearing hunting/shooting specific clothing is recommended as this may alter eye relief considerations slightly.*

WARNING

If a scope is mounted too far to the rear, the eyepiece can injure the shooter's brow. Shooting at an uphill angle also increases this hazard because it shortens the distance between the brow and the rear of the scope. For this reason, Leupold scopes are engineered to provide generous eye relief. Therefore, when mounting your scope, we recommend positioning it as far forward in the mounts as possible to take full advantage of this generous eye relief.



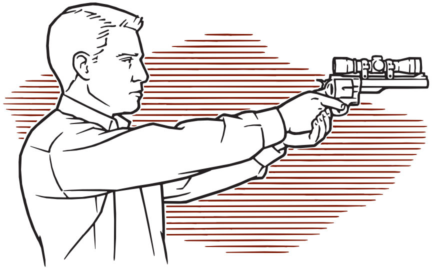
Leupold riflescopes are engineered to provide a generous 3" to 5" eye relief, depending on the model and the magnification level.

ESTABLISHING EYE RELIEF ON HANDGUN SCOPES

Since handguns are typically fired from an arms-extended position, eye relief is less of a safety issue than with riflescopes. However, it's still important to get the eye relief right for you.

1. Holding the handgun in your normal shooting stance, position the scope in the rings to achieve a full field-of-view.

2. Proceed to COMPLETING THE INSTALLATION.



The eye relief of handgun scopes is more forgiving than that of riflescopes. Nevertheless, it is important that the eye relief is compatible with your shooting style.

Unlike riflescopes, adjustments to the eyepiece in handgun scopes affect the eye relief as well as the reticle focus. Turning the eyepiece clockwise increases eye relief and turning it counterclockwise decreases it.

COMPLETING THE INSTALLATION

1. Without disturbing the optimal eye relief position, rotate the scope until the elevation adjustment dial is at the top of the scope.
2. From a firing position, check to be sure that the vertical hair of the reticle aligns with the vertical axis of the firearm. Misalignment will not affect accuracy at moderate distances but it can diminish long range accuracy.
3. When you are satisfied, tighten the ring screws evenly and securely.

FOCUSING THE RETICLE

Secure the scope and firearm in a firm rest. Safely point the scope at a light colored background object. With the scope approximately four inches from your eye the reticle should appear sharp and crisp; if it does not, it is necessary to adjust the focus by means of the eye piece.

If your Leupold scope is one of our models with an eyepiece that has a lock ring, follow these simple steps:

1. Grasp the eyepiece with your hand and back it away from the lock ring. Once the lock ring is free from the eyepiece, turn it clockwise away from the eyepiece to keep it out of the way during the adjustment.
2. If you tend to hold things away from yourself to see them clearly (you are farsighted) turn the eyepiece counterclockwise a couple of turns. If you hold things close to yourself to see them clearly (you are nearsighted) turn the eyepiece clockwise a couple of turns.
3. Looking through the scope when pointed at the sky, take a few quick glances at the reticle. The focus of the reticle should be noticeably different from when you started. Continue this process until the reticle appears clear and sharp.
4. When you are satisfied with the image of the reticle, turn the lock ring so that it rests firmly against the eyepiece.

If your Leupold scope is one of our models without an eyepiece lock ring, follow these simple steps:

1. All adjustment is made with the eyepiece.
2. Look through the scope with quick glances while focusing the reticle image. If you tend to hold things away from yourself to see them clearly (farsighted) turn the eyepiece ring counter-clockwise until the reticle is clear and sharp. If you hold them close to yourself to see them clearly (nearsighted) turn the eye-piece ring clockwise until the reticle is sharp and clear.

If your eyesight changes, readjust the eyepiece. As we age, eyesight normally changes. You may want to check the sharpness of the reticle on your scope every few years to ensure it is still adjusted correctly for your eye.

> NOTE: *To protect the integrity of the waterproof seal of every Leupold Golden Ring scope, an internal mechanism prevents the eyepiece from being removed.*

The primary function of a scope is to aim the firearm. Never use the scope as a substitute for binoculars. Never watch another person through the scope. As always, the Golden Rule applies.

How to Sight-In

USING A BORE-SIGHTING COLLIMATOR

To save time and ammunition, start out in your shop or gun room with a bore-sighting collimator. Follow the directions included with the collimator for specific instructions on its proper use. Remember, when possible, it is better to make the initial windage adjustments to the mount base before using the scope's windage adjustment.

NOTE: *Bore-sighting alone is not sufficient to sight-in a scope. You must make final adjustments by shooting the firearm using the same ammunition you use in the field.*

USING THE LEUPOLD ZERO POINT ILLUMINATED MAGNETIC BORESIGHTER

This tool fits any rifle, shotgun, or pistol, and helps you get "on the paper" fast, without barrel spuds. It works with any optical sight, and can even be used to recheck your zero, without firing a shot. See your Leupold Golden Ring Dealer or visit www.leupold.com for more information.

TRADITIONAL BORE-SIGHTING (BOLT ACTIONS)

Preliminary sighting-in can also be accomplished by bore-sighting at the firing range using a target from 20 to 50 yards away.

1. Position the firearm on the bench, using sandbags to steady the firearm.
2. Remove the bolt from the firearm.
3. Looking through the bore itself, move the firearm to center the bull's-eye of the target inside the barrel, as shown in Figure A.
4. Hold the rifle steady. With the bull's-eye centered when viewed through the bore, make windage and elevation adjustments to the scope until the very center of the reticle is aligned with the bull's-eye of the target, as shown in Figure B.



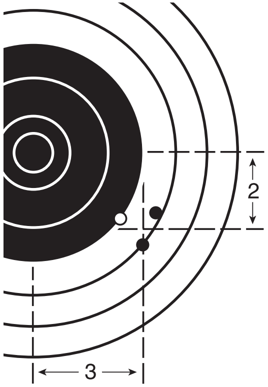
THE FINAL STEP: THREE-SHOT GROUPS

Whichever bore-sighting method you've used, the next steps are the same on the firing range. To ensure reliable results, always fire from a rested position when performing these steps. (If you are using an

adjustable objective or side focus model scope, perform any correction for parallax before continuing, as explained in "Understanding Parallax" on pages 29-32.)

1. Fire a shot or two.
2. If you are several inches off center, make an appropriate amount of adjustment to move the reticle to the center of the target.
3. Carefully fire a three-shot group.
4. Use the center of that group as a reference point for the final adjustments to windage and elevation.

On the sample target, the center of the group is two inches low and three inches right. Assuming you're sighting-in at 100 yards, you should make a 2-MOA adjustment up, and a 3-MOA adjustment left. Your next three-shot group should be very close to the center of the target. To learn about making final adjustments, proceed to the upcoming section on windage and elevation adjustments.



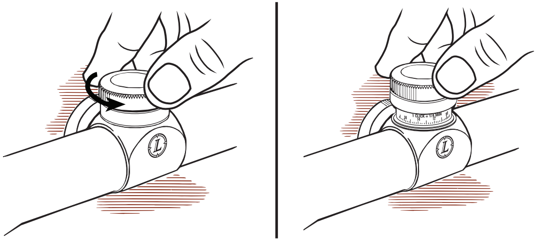
Making Precise Windage And Elevation Adjustments

The style of elevation and windage adjustments on Leupold riflescopes varies with specific models. Each, however, is clearly marked in easy to read increments. If, for example, there are four hash marks from zero to (and including) the number one on an adjustment knob, then the value of each increment of adjustment on that knob is 1/4-MOA. It is the same with all Leupold adjustment dials. One-MOA moves the point of impact at 100 yards by 1 inch. At 100 meters, it moves 29mm.

The letters found on the windage and elevation dials refer to the direction that the point-of-impact of the bullet is moved when an adjustment is made.

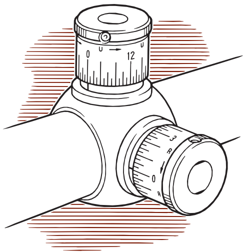
ADJUSTING WINDAGE AND ELEVATION ON VX®-7 RIFLESCOPES (SPEEDIAL™)

The adjustment cover is integral to the adjustment mechanism. To make a correction, simply rotate the adjustment cover counter-clockwise until it "pops up," fully revealing the adjustment indication markings, and make the appropriate correction. To secure the adjustment cover, push down while tightening the cover.



ADJUSTING WINDAGE AND ELEVATION ON TARGET AND TACTICAL SCOPES

Leupold Target, Competition, and most Tactical scopes have micrometer-style windage and elevation adjustments. A click for each adjustment division can be both heard and felt so adjustments to the scope can be made without looking at the dials. Indicators on the micrometer portion of the dial show the number of complete 360° rotations that have been made.



Target style adjustments for range and wind adjustments in the field.

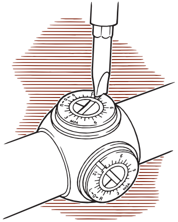
BULLET DROP COMPENSATION DIALS

Special bullet drop compensation (BDC) elevation dials are featured on selected scopes. These dials are calibrated to achieve adjustment to specific distances rapidly by distance indicators marked directly on the dials.

ZEROING THE WINDAGE AND ELEVATION DIALS AFTER SIGHTING IN

All Leupold scopes feature adjustment dials that can be repositioned to align the marked zero of the dial with the position indicator without changing the adjustment setting of the scope. This allows the shooter to know the original zero of the rifle in the event that further adjustments are made in the field.

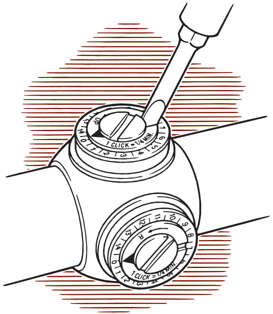
To reposition the dials on Rifleman®, VX®-I, and FX™-I models, place a coin or screwdriver in the slot in the numbered dial and rotate it so that the zero aligns with the stamped line indicator mark on the top of the adjustment screw that is perpendicular to the coin slot.



Rifleman, VX-I, and FX-I dials adjust easily to indicate the new zero position.

VX-II and FX-II models have a pointer dial that moves with the adjustment slot. This dial also can be moved independently to align with the zero on the outermost dial. To reposition this dial simply rotate it until the pointer is aligned with the zero.

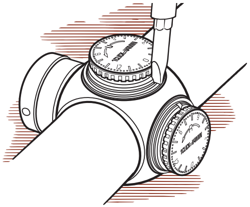
VX-3 and FX-3 models have an indicator dial that can be moved independently to align with the zero on the adjustment dial. To reposition this dial simply rotate it until the position indicator notch is aligned with the zero of the adjustment dial.



VX-II, FX-II

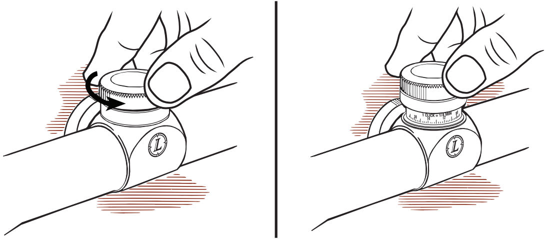
VX-II, VX-3, FX-II and FX-3 dials have a separate pointer dial that can be adjusted to indicate the new zero position.

VX-3, FX-3



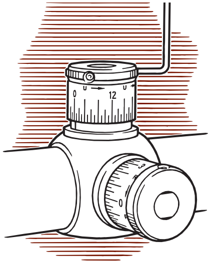
To reposition the dials on VX-7 riflescopes:

1. Unscrew the adjustment cover until it "pops up," fully revealing the adjustment indication markings and set screws.
2. Loosen the set screws that surround the top of the dial portion.
3. Move the cylinder dial by hand to align the zero with the gold witness mark at the base of the cylinder.
4. Secure the set screws.



To reposition the dials on Target and Tactical models:

1. Loosen the set screws that surround the top of the knob until the cylinder turns freely.
2. Move the cylinder dial by hand to align the zero with the white perpendicular mark at the base of the cylinder.
3. Tighten the set screws until the cylinder is secure.



Target-style dials can be adjusted to the new zero position by loosening the set screws, rotating the dial, and tightening the set screws.

CENTERING WINDAGE AND ELEVATION ADJUSTMENTS TO ACHIEVE OPTIMUM ADJUSTMENT TRAVEL

Making windage and elevation adjustments moves the entire erector system horizontally and vertically inside the scope. If the erector system is off to one side – as a result of having been mounted on a non-adjustable mount – the adjustments won't provide equal travel in all directions. To regain full balanced travel, you must recenter the adjustment as follows:

1. Turn the windage adjustment to the point that it stops moving.
2. Counting the clicks or hash marks, turn it all the way in the other direction.
3. Turn the dial back half the amount of clicks or hash marks counted.
4. Repeat this process for the elevation adjustment.

What You Should Know About Variable Power Scopes

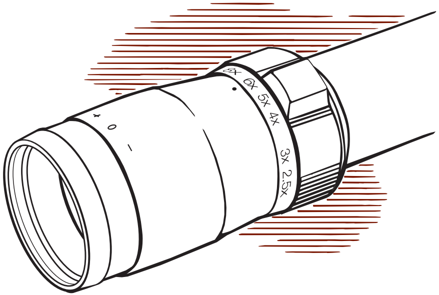
Leupold variable power scopes allow you to select from a range of magnifications to suit your particular rifle, cartridge, and shooting needs.

WARNING: Do not loosen the screw in the power selector ring. Doing so will release the internal gas that keeps the scope fog free. Loosening the screw will also disconnect a pin that controls the internal operations, causing other problems that would require factory repairs. Do not lubricate the power selector ring; doing so is unnecessary.

All variable power scopes have a power selector ring in front of the eyepiece assembly. Turn the ring to align the number indicating the desired magnification with the indicator on the body of the scope.

VX-7 BALLISTICS INDICATOR RING

Certain ballistics-compensation reticles such as the Boone and Crockett, and Varmint Hunter's reticle may require tuning to achieve maximum precision with multiple loads. The VX-7 ballistics indicator ring allows you to manually set a reference point for your current trajectory. Once the proper magnification setting has been determined (see Ballistics Aiming System instruction supplement), the ballistics indicator ring can be aligned with the witness mark on the eyepiece, allowing fast and accurate return to this setting in the field.



RANGE ESTIMATING WITH VX-3 SCOPES

Selected VX-3 scopes have a built-in range estimator. This system uses the Duplex® portion of the reticle in combination with an additional set of numbers on the power selector ring. (Also see the Leupold Range Estimating Reticle Instructions for other reticle types.) In scopes with this feature the space between the tip of the thicker post of the Duplex reticle and the center of the reticle covers 16 inches at 200 yards (the size of a Whitetail buck from backbone to brisket).

> NOTE: *The Duplex reticle was designed to estimate ranges based on the backbone to brisket dimension of a Whitetail buck. The distance of other game with a body dimension that is known to be 16 inches (or 32 inches if the measurement is taken from post to post instead of post to crosshair) may certainly be estimated. It is necessary to know the approximate physical size of your target whenever you estimate range.*

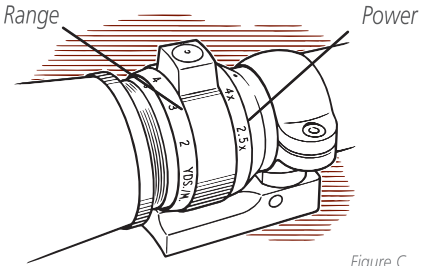


Figure C

On scopes with this feature, the numbers facing forward show the scope's magnification settings. The numbers facing the back are for ranging and show the distances in yards, as shown in Figure C.

To estimate range, follow these steps:

1. View the target through the scope.
2. When targeting an animal with a body that is 16 inches from backbone to brisket, adjust the power selector until that area of the animal's body fits between the center of the crosshair and the top of the lower heavy post.
3. Read the number on the power selector ring to determine the approximate distance in yards.



Bracket the animal from backbone to brisket.

UNDERSTANDING PARALLAX

Parallax is the apparent movement of the target relative to the reticle when you move your eye away from the center point of the eyepiece. It occurs when the image of the target does not fall on the same optical plane as the reticle. This can cause a small shift in the point of aim.

Maximum parallax occurs when your eye is at the very edge of the exit pupil. (Even in this unlikely event, our 4x hunting scope focused for 150 yards has a maximum error of only 8/10ths of an inch at 500 yards.)

At short distances, the parallax effect does not affect accuracy. (Using the same 4x scope at 100 yards, the maximum error is less than 2/10ths of an inch.) It is also good to remember that, as long as you are sighting straight through the middle of the scope, or close to it, parallax will have virtually no effect on accuracy in a hunting situation.

ABOUT FIXED PARALLAX DISTANCE SCOPES

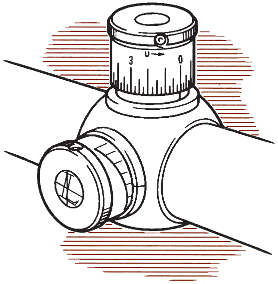
Any fixed focus optical system can be adjusted to be parallax free at only one distance. Most Leupold scopes are adjusted at the factory to be parallax free at 150 yards. However, there are exceptions:

1. Leupold rimfire scopes are set to be parallax free at 60 yards.
2. Leupold shotgun/muzzleloader scopes are set to be parallax free at 75 yards.

3. Leupold Handgun and Ultralight 2.5x scopes are set to be parallax free at 100 yards.

THE ADVANTAGE OF ADJUSTABLE PARALLAX SETTING SCOPES

Target shooting and varmint hunting demand extreme accuracy. You must have a scope with a parallax adjustment dial for precise shooting at various ranges. The parallax adjustment can be located either at the objective end of the scope or on the side of the adjustment turret housing. The adjustment moves a lens within the scope causing the target image and the reticle to fall on the same optical plane. This ensures optimal accuracy at the distance of the target.



Side Parallax Adjustment

To eliminate parallax in adjustable objective and long range (side focus) scopes, follow these steps:

1. The reticle should be clear (focused) before adjusting the parallax. If it is not, follow the instructions under "Focusing the Reticle." See page 11.
2. With the firearm in a stable position, look through the scope, concentrating on the center aiming point of the reticle.
3. Move your head slightly up and down while turning side parallax or adjustable objective ring until the reticle does not move in relation to the target. Using the numbers on the adjustable objective ring, you can get your parallax adjustments close to the proper setting before assuming a shooting position.

NOTE: *Settings may vary slightly per individual preferences, air temperature, and atmospheric conditions.*

NOTE: *The side parallax adjustment knob is not to be used to focus the target image. If the reticle is first focused and the parallax then properly set, the image should be clear.*

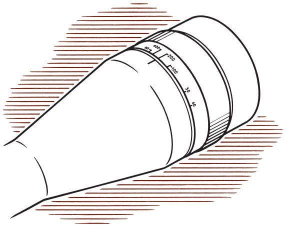
EFR SCOPES AND THE ADJUSTABLE OBJECTIVE

Leupold EFR (Extended Focus Range) scopes can eliminate parallax for distances as short as 10 meters. Unlike conventional adjustable objective scopes, the focus ring on EFR models rotates more than 360°. It is important to pay special attention when adjusting these scopes.

1. Turn the focus ring counterclockwise (when viewing though the eyepiece) until it stops.
2. Turn the focus ring clockwise until the “10m” mark aligns with the indicator mark on the bell of the scope.
3. From this point, all readings of the focus ring are in numerical order when the ring is turned clockwise from the shooting position.
4. Adjust the ring as you would a standard adjustable objective model.

INSTALLING A LENS ATTACHMENT

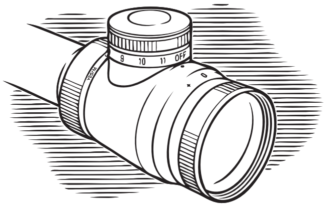
Many Leupold scopes offer threaded objective and eyepiece rings to allow for the attachment of lens covers and a variety of Alumina® accessories. These attachments thread directly into the objective or eyepiece rings. Turn until finger tight – do not over tighten.



To adjust the parallax distance, turn the focus ring.

Using the Illuminated Reticle

All Leupold Illuminated Reticle scopes may be used in either the standard or the illuminated state. When not illuminated, the reticle performs the same as the reticle in a standard Leupold scope. Illuminating the reticle allows a better distinction to be made in poorly lighted conditions between the target and the precise position of the aiming point.



The control dial for the Leupold Illuminated Reticle is located above the eyepiece.

To illuminate the reticle:

1. Grasp the illumination dial located at the top of the eyepiece shell.
2. Turn the dial clockwise from the OFF position to the first number indicated on the dial.
3. View the target through the scope to determine if the reticle is bright enough to stand out clearly against the target.
4. If more illumination is required, continue turning the dial clockwise until the reticle is clearly visible against the target.

To preserve the life of the battery, always remember to turn the illumination dial to the OFF position when the scope is not in use.

For prolonged storage, remove the battery.

If the reticle fails to illuminate or appears dim even on the highest illumination setting, it is necessary to change the battery.

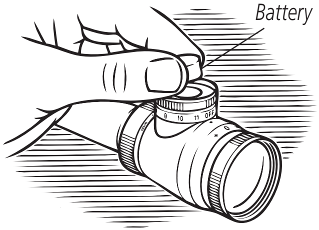
WARNING: Always check to ensure that the firearm is unloaded before changing the battery in the scope.

Changing the Battery

All Leupold Illuminated Reticle scopes use a 3-volt lithium photo battery. See page 36.

To change the battery:

1. Remove the battery cover by grasping its edge (located around the top of the illumination dial) and twisting the cover counterclockwise while holding the sides of the illumination dial to keep the entire dial from turning.
2. Remove the old battery from its position in the center of the dial.



The battery for the Leupold Illuminated Reticle is located inside the control dial and can be changed without tools.

This can be done in two ways:

a. Grasp the edges of the battery between the thumb and forefinger and lift it free of the dial.

OR

b. Turn the scope so that the illumination dial faces downward and gently tap the eyepiece against the edge of your palm.

3. Insert the new battery, positive (+) side up.

4. Replace the battery cover on the illumination dial and turn it clockwise until it is secure while holding the sides of the illumination dial to keep the entire dial from turning.

Replacement 3-volt lithium batteries:

Duracell®	*DL1/3N*	*Varta®*	*CR1/3N*
Eveready®	*2L76*	*Sanyo®*	*CR1/3N*
Kodak®	*K58L*		

There may be other lithium batteries that are acceptable with your Leupold Illuminated Reticle scope. Check with your local retailer for other options.

Leupold Means Minimal Maintenance

LENSES

Leupold scope lenses are coated to reduce light reflections and light scattering, thus increasing light transmission through the scope. They should be cleaned as carefully as you would a camera lens. Begin by using a lens brush to remove dust and then pure alcohol, high-grade glass cleaner, or pure water on a cotton swab.

WINDAGE / ELEVATION ADJUSTMENTS

These adjustments are permanently lubricated. There is no need to lubricate them. Keep the adjustment covers on, except when adjusting, to keep out dust and dirt. (It's worth noting that, unlike competitive brands, Leupold scopes are waterproof even without the caps in place.)

EYEPIECE ADJUSTMENT

This adjustment is permanently lubricated. There is no need to lubricate it. The eyepiece can be rotated as far as it will go in either direction. It will not detach from the scope as there is an internal lock ring.

SEALS

Leupold scopes are sealed from within by several methods, including O-rings. All seals are permanent and require no maintenance.

SCOPE EXTERIOR

Leupold scopes are made of rugged 6061-T6 aircraft aluminum alloy. No maintenance of any kind is required; simply wipe off any dirt or fingerprints that accumulate with a clean, dry cloth.

POWER SELECTOR RING (ON VARIABLE POWER SCOPES)

No lubrication is ever required on the power selector ring. DO NOT LOOSEN OR REMOVE THE HEX-HEAD SCREW IN THE POWER SELECTOR RING.

ADJUSTABLE OBJECTIVE/SIDE PARALLAX DIAL

No lubrication is required.

TROUBLE SHOOTING TIPS

Before you ship a scope back to the factory for service or repair, please check the following items.

1. Check the mount. Make sure the scope is mounted securely to the rifle. Try, with bare hands only, to gently twist the scope in the rings or see if anything moves when you jiggle it. If there is any movement, retighten the mounting system according to mounting instructions.

2. Make sure the action of your rifle is properly bedded in the stock, and that all receiver screws are tight and have been tightened in the sequence recommended by the manufacturer. A loosely fitted stock can cause changes to the point-of-impact.
3. When test firing a rifle to check the point-of-impact relative to windage and elevation adjustments, be sure to fire from a solid bench with sandbags supporting the forearm and buttstock.
4. Be sure to use factory-loaded ammunition of the same bullet type, weight, and preferably, lot number. If one type of ammunition does not shoot well, try another brand or bullet weight.
5. Be certain that both the barrel and chamber are clean. Heavy factory grease or copper fouling on an older one can diminish the accuracy of the firearm.

LEUPOLD PRODUCT SERVICE

If your Leupold Golden Ring scope fails to perform in any way, you may return it directly to the factory (or one of our international service centers) for service. We recommend contacting Leupold Technical Service at 1-800-Leupold (538-7653), and following these shipping instructions:

1. Remove the rings and any other accessories from the scope.
2. Record the serial number of the scope and keep it for your records.
3. Include a note with your name, address, telephone number, E-mail, and a description of the problem.
4. Pack the scope in its original box (if you have it), as this is the

safest shipping container. Wrap the package securely using filament strapping tape on the outside.

5. Ship the scope by parcel or mail service (insured, if possible) to one of the following addresses:

In the United States:

Parcel Service:
Leupold Product Service
14400 NW Greenbrier Parkway
Beaverton, OR 97006-5790
USA

By Mail:
Leupold Product Service
P.O. Box 688
Beaverton, OR 97075-0688
USA

Outside the United States:

Canada: Korth Group Ltd., 103 Stockton Point, Box 490
Okotoks, AB T1S 1A7, Canada

Germany: Harold Ros, Coburger Strasse 71,
98673 Eisfeld, Germany

Sweden: HDF Gyttorp Jakt AB, Svarvaregatan 5,
S-302 50 Halmstad, Sweden

Our Product Service telephone numbers are (503) 526-1400 or (800) LEUPOLD (538-7653), fax is (503) 352-7621. They can also be contacted through our Web site at www.leupold.com.

The Best Consumer Protection in the Business

All Leupold Golden Ring products are made with your absolute satisfaction in mind. That's why we offer the Leupold Full Lifetime Guarantee:

If any Leupold Golden Ring product is found to have defects in materials or workmanship, we will, at our option, repair or replace it. Free. Even if you are not the original owner. No warranty card required. No time limit applies.

The Leupold Guarantee in Germany and other countries where legally prohibited: Leupold is convinced of the high-quality and reliability of its Golden Ring products. This is why each U.S. customer is afforded a lifetime guarantee. For legal reasons, this guarantee must be restricted to 30 years in Germany and other countries where an unlimited lifetime guarantee is prohibited. Each owner, even those that acquired a Golden Ring product used, can make use of this 30 year guarantee.

THE LEUPOLD ELECTRONIC WARRANTY

Certain Leupold scopes are equiped with electronic components, which operate independently of the mechanical and optical systems of the scopes. Theseelectronic components are warranted for a full two years against all material and manufacturing defects. This

warranty is effective from the date of purchase of the scope. If, within the course of normal usage, the electronic components of any Leupold scope malfunction within this period, we will, at our option, repair or replace it.

LEUPOLD MAKES MORE THAN SCOPES

See our complete line of rangefinders, mounting systems, binoculars, spotting scopes, and accessories at your nearest Leupold dealer.

For a free Leupold catalog, write to:
Leupold & Stevens, Inc., P.O. Box 688, Beaverton, OR 97075,
call (503) 526-1400 **or** (800) LEUPOLD (538-7653),
or send us an E-mail through our Web site at www.leupold.com.

The Leupold package is made in part from recycled materials and is 100% recyclable. This includes the black polypropylene supports, which are made of an accepted recyclable material. Many Leupold owners keep their scope boxes. If you have no use for yours, we encourage you to dispose of it responsibly. The special cloth surrounding your new scope was designed to be reusable; consider making it part of your regular gun care kit.

 Note: We reserve the right to make design and/or material modifications without prior notice.

Leupold products are manufactured under one or more of the following patents: U.S. Patents: 5,035,487; 5,231,535; 5,671,088; 5,866,048; 6,005,711; 6,279,259; 6,295,754; 6,351,907; 6,359,418; 6,469,829; 6,519,890, 6,691,447; 6,816,305; 7,088,506; D347,441; D403,393; D413,153; D414,835; D415,546; D416,972; D420,718; D420,807; D421,286; D427,658; D490,097; D506,520; D512,449; D517,153; D519,537. Foreign Patents: BX30938-00; CA-Rd./Enr.1999-88472; DE49903766.9; DE69216763T; DE-M9304093.8; DE202005017276U1; EP0540368; GB0540368; IL31338; IT75604; JP1074623; SE55201; TW148948; EM59613; EM393467.

VEUILLEZ LIRE CE MANUEL EN ENTIER AVANT DE MONTER VOTRE LUNETTE DE VISÉE.

– Mise en garde –

Vérifiez toujours et assurez-vous que l'arme à feu soit déchargée avant d'entreprendre tout travail sur l'arme.

ÉTABLISSEMENT DE LA POSITION DE L'OEIL POUR LES CARABINES ET FUSILS

À cause des considérations de sécurité associées à la bonne position de l'œil, Leupold recommande fortement de monter votre lunette de visée aussi loin que possible vers l'avant. Suivez aussi les étapes suivantes :

1. Avec la lunette de visée aussi loin que possible vers l'avant des montures, tenez la carabine dans votre position normale de tir. (Les lunettes de visée à grossissement variable devraient être placées à la valeur de grossissement la plus élevée pour cette démarche.)
2. Déplacez lentement la lunette de visée vers l'arrière jusqu'à ce que vous voyiez un champ de visée complet.
3. Placez votre lunette de visée ici pour une position de l'œil maximale.
4. Passez à TERMINER L'INSTALLATION.

REMARQUE : *pour confirmer que votre lunette de visée est montée à la meilleure position possible, essayez plusieurs positions : à genoux, assis, accroupi et en visant en amont et en aval. Rappelez-vous que viser en amont réduit typiquement la position de l'œil. Il est recommandé de porter des vêtements de chasse/tir car cela pourrait modifier légèrement la position de l'œil.*

– Avertissement –

Si une lunette de visée est montée très loin vers l'arrière, l'oculaire de visée pourrait blesser le front du tireur. Tirer dans un angle en amont augmente aussi ce danger car cela réduit la distance entre le front et l'arrière de la lunette de visée. Pour cette raison, les lunettes de visée Leupold sont aussi fabriquées pour offrir une bonne position de l'œil. Donc, en montant votre lunette de visée, nous recommandons de la placer aussi loin que possible vers l'avant dans les montures pour tirer profit de cette généreuse position de l'œil.

TERMINER L'INSTALLATION

1. Sans déplacer la position de l'œil optimale, tournez la lunette de visée jusqu'à ce que le cadran d'ajustement d'élévation soit au sommet de la lunette de visée.
2. D'une position de tir, vérifiez pour vous assurer que le fil vertical du réticule s'aligne avec l'axe vertical de l'arme à feu. Un mauvais alignement n'affectera pas l'exactitude à des distances modérées, mais pourrait réduire l'exactitude de grande portée.
3. Lorsque vous avez ce que vous recherchez, resserrez bien les vis de l'anneau uniformément.

MISE AU POINT DU RÉTICULE

Installez bien la lunette de visée et l'arme à feu dans un appui ferme. Pointez la lunette de visée vers un objet pâle à l'arrière-plan. Avec la lunette de visée à environ quatre pouces de votre œil, le réticule devrait être précis et net; si tel n'est pas le cas, il faut ajuster la mise au point avec l'oculaire.

Si votre lunette de visée Leupold est l'un de nos modèles à oculaire à anneau de verrouillage, suivez ces étapes simples :

1. Agrippez l'oculaire de la main et reculez de l'anneau de verrouillage.

Lorsque l'anneau est dégagé de l'oculaire, tournez-le dans le sens horaire en l'éloignant de l'oculaire pour qu'il n'entrave pas l'ajustement.

2. Si vous avez l'habitude de tenir les choses loin de vous-même pour voir clairement (vous êtes hypermétrope), tournez l'oculaire dans le sens antihoraire de quelques tours. Si vous tenez les choses près de vous-même pour les voir clairement (vous êtes myope), tournez l'oculaire dans le sens horaire de quelques tours.
3. Regardez par la lunette de visée pointée vers le ciel et jetez un coup d'œil au réticule. La mise au point du réticule devrait être vraiment différente du point de départ. Continuez cette procédure jusqu'à ce que le réticule semble clair et précis.
4. Lorsque vous êtes satisfait de l'image du réticule, tournez l anneau de verrouillage pour qu'il repose fermement contre l'oculaire.

REMARQUE *: pour protéger l'intégrité du joint étanche de toute lunette de visée Leupold Golden Ringscope, un mécanisme interne empêche l'oculaire de se séparer de la lunette de visée.*

ÉTABLIR DES AJUSTEMENTS PRÉCIS DE DÉRIVE ET D'ÉLÉVATION

Le style d'ajustements d'élévation et de dérive sur les lunettes de visée pour carabine varie selon les modèles. Chacun est clairement marqué en incréments faciles à lire. Si, par exemple, il y a quatre symboles de numéro de zéro à (y compris) le chiffre un sur un bouton d'ajustement, alors la valeur de chaque incrément d'ajustement sur ce bouton est de 1/4-MOA. C'est la même chose pour les cadrans d'ajustement Leupold. Un MOA déplace le point d'impact à 100 verges par pouce. À 100 mètres, il se déplace de 29 mm.

Les lettres qui se trouvent sur les cadrans d'élévation et de dérive portent sur la direction de déplacement du point d'impact de la balle lors d'un ajustement.

AJUSTEMENTS DE DÉRIVE ET D'ÉLÉVATION DES LUNETTES DE VISÉE POUR CARABINE VX®-7 (SPEEDIAL™)

Le couvercle d'ajustement est une partie intégrale du mécanisme d'ajustement. Pour toute correction, tournez simplement le couvercle d'ajustement dans le sens antihoraire jusqu'à ce qu'il "ressorte", révélant ainsi les marques d'ajustement et corrigez. Pour replacer le couvercle d'ajustement, enfoncez tout en resserrant le couvercle.

AJUSTEMENTS DE DÉRIVE ET D'ÉLÉVATION DES LUNETTES DE VISÉE DE CIBLE ET TACTIQUES

Les lunettes de visée de cible, de compétition et la plupart des lunettes de visée tactiques Leupold offrent des ajustements de dérive et d'élévation de style micromètre. Vous pouvez entendre et sentir un clic pour chaque division d'ajustement ce qui vous permet d'ajuster sans regarder les cadrans. Les indicateurs de la partie micromètre du cadran présentent le nombre de rotations complètes de 360° terminées.

REMISE À ZÉRO DES CADRANS DE DÉRIVE ET D'ÉLÉVATION APRÈS LE ZÉROTAGE

Toutes les lunettes de visée Leupold comprennent des cadrans d'ajustement pouvant être repositionnés pour aligner le zéro du cadran avec l'indicateur de position sans modifier le réglage d'ajustement de la lunette de visée. Ceci permet au tireur de connaître le zéro original de la carabine s'il doit effectuer d'autres ajustements sur le terrain. Pour repositionner les cadrans des modèles

Rifleman™, VX™-I, et FX™-I, placez une pièce de monnaie ou un tournevis dans la fente du cadran numéroté et tournez-le pour que le zéro s'aligne avec la marque de l'indicateur à ligne étampée sur le dessus de la vis d'ajustement perpendiculaire à la fente de monnaie.

Les modèles VX-II et FX-II ont un cadran à flèche qui se déplace avec la fente d'ajustement. Ce cadran peut aussi se déplacer indépendamment pour s'aligner avec le zéro du cadran extérieur. Pour repositionner ce cadran, tournez-le tout simplement jusqu'à ce que la flèche s'aligne avec le zéro. Les modèles VX-3 et FX-3 ont un cadran indicateur qui peut se déplacer indépendamment pour s'aligner avec le zéro du cadran d'ajustement. Pour repositionner ce cadran, tournez-le tout simplement jusqu'à ce que l'encoche d'indication de position s'aligne avec le zéro du cadran d'ajustement.

Pour repositionner les cadrans des lunettes de visée de carabine VX-7® :

1. Desserrez le couvercle d'ajustement jusqu'à ce qu'il "ressorte", révélant bien ainsi les marques d'ajustement et les vis de réglage.

2. Desserrez les vis de réglage qui entourent le dessus du cadran.

3. Déplacez le cadran du barillet à la main pour aligner le zéro avec le repère dorée à la base du barillet.

4. Installez les vis de réglage.

Pour repositionner les cadrans des modèles Target et Tatical :

1. Desserrez les vis de réglage qui entourent le dessus du bouton jusqu'à ce que le barillet tourne librement.

2. Déplacez le cadran du barillet à la main pour aligner le zéro avec la marque blanche perpendiculaire à la base du barillet.

3. Resserrez les vis de réglage jusqu'à ce que le barillet soit fixé solidement.

CENTRER LES AJUSTEMENTS DE DÉRIVE ET D'ÉLÉVATION POUR OBTENIR UN DÉPLACEMENT OPTIMAL

Les ajustements de dérive et d'élévation déplacent tout le système érecteur horizontalement et verticalement à l'intérieur de la lunette de visée. Si le système érecteur est déplacé d'un côté, suite à un montage sur une monture non réglable, les ajustements ne permettront pas de déplacement égal dans toutes les directions. Pour retrouver un déplacement complet équilibré, vous devez recentrer l'ajustement comme suit :

1. Tournez l'ajustement de dérive jusqu'à ce qu'il cesse d'avancer.

2. Comptez les clics ou les marques de numéro et tournez jusqu'au bout dans l'autre direction.

3. Ramenez le cadran à la moitié des clics ou marques de numéro comptés précédemment.

4. Répétez cette démarche pour l'ajustement d'élévation.

UTILISER LE RÉTICULE ÉCLAIRÉ

Toutes les lunettes de visée à réticule éclairé Leupold peuvent servir en mode courant ou éclairé. Lorsque l'appareil n'est pas éclairé, le réticule joue le même rôle qu'un réticule de lunette de visée standard Leupold. Éclairer le réticule permet de mieux distinguer dans des conditions de mauvais éclairage entre la cible et la position précise du point ciblé.

Pour éclairer le réticule :

1. Agrippez le cadran d'éclairage sur le dessus du corps de l'oculaire.

2. Tournez le cadran dans le sens horaire de la position « OFF » au premier chiffre sur le cadran.

3. Regardez la cible par la lunette de visée pour déterminer si le réticule est assez clair pour ressortir clairement par rapport à la cible.

4. S'il faut plus d'éclairage, continuez à tourner le cadran dans le sens horaire jusqu'à ce que le réticule soit bien visible contre la cible.

Pour conserver la pile, rappelez-vous toujours d'éteindre le cadran d'éclairage en le plaçant à la position « OFF » si vous n'utilisez pas la lunette de visée. Pour un rangement à long terme, retirez la pile.

Si le réticule ne s'allume pas ou semble faible même en choisissant le réglage le plus élevé, il faut changer la pile.

– Avertissement –

Vérifiez toujours pour vous assurer que l'arme à feu soit déchargée avant de changer la pile de la lunette de visée.

SERVICE DES PRODUITS LEUPOLD

Si votre lunette de visée Leupold Golden Ring ne fonctionne pas correctement, vous pouvez la retourner directement à l'usine (ou à l'un de nos centres internationaux) pour le service. Il n'est pas nécessaire que votre concessionnaire expédie la lunette de visée à Leupold, mais il peut vous être utile pour déterminer s'il faut un service en usine. Veuillez suivre ces directives d'expédition :

1. Retirez les anneaux et tous les autres accessoires de la lunette de visée.
2. Enregistrez le numéro de série de la lunette de visée et conservez-le pour vos dossiers.
3. Ajoutez une note avec votre nom, votre adresse, votre numéro de téléphone, votre courriel et une description du problème.
4. Emballez la lunette de visée dans sa boîte originale (si vous l'avez) car ceci est le contenant d'expédition le plus sûr. Emballez bien le paquet à l'aide d'un ruban feuillard à filament à l'extérieur.
5. Expédiez la lunette de visée par messagerie ou par service postal (assuré, si possible) à l'une des adresses suivantes :

Aux États-Unis :

Service de messagerie :
Leupold Product Service 14400 NW Greenbrier Parkway
Beaverton, OR 97075-0688 USA

Par la poste :Leupold Product Service P.O. Box 688
Beaverton, OR 97006-5790 USA

À l'extérieur des États-Unis :

Canada : Korth Group Ltd., 103 Stockton Point, Box 490
Okotoks, AB T1S 1A7, Canada

Allemagne : Harold Ros, Coburger Strasse 71, 98673 Eisfeld, Allemagne

Suède : HDF Gyttorp Jakt AB, Svarvaregatan 5, S-302 50 Halmstad, Suède

Le numéro de téléphone de notre service technique est le **(503) 526-1400**, ou **(800) LEUPOLD (538-7653)**,
le fax est le **(503) 352-7621.**
Vous pouvez aussi les contacter sur notre site Web à **www.leupold.com**.

CENTRADO DE AJUSTES DE CORRECCIÓN POR EFECTO DEL VIENTO Y DE LA ELEVACIÓN PARA LOGRAR UN DESPLAZAMIENTO DE AJUSTE ÓPTIMO

Al hacer ajustes de corrección por efecto del viento y de la elevación se desplaza la totalidad del sistema erector horizontal y verticalmente en la mira telescópica. Si este sistema está desviado hacia un lado – como resultado de haberlo instalado sobre una base de montaje no ajustable – los ajustes no proporcionarán un desplazamiento equivalente en todas las direcciones. Para recuperar el desplazamiento completo y equilibrado, será necesario volver a centrar el ajuste de la manera siguiente:

1. Gire el ajuste de corrección por efecto del viento hasta que éste tope.

2. Contando los "clic" o las marcas de referencia, gírelo completamente en la otra dirección.

3. Gire el cuadrante retrocediendo la mitad de la cantidad de "clic" o marcas de referencia contadas.

4. Repita este proceso para el ajuste de elevación.

CÓMO USAR LA RETÍCULA ILUMINADA

Todas las miras telescópicas de Leupold con retículas iluminadas se pueden utilizar en estado estándar o en estado iluminado. Al no estar iluminada, la retícula funciona de la misma manera que la retícula en una mira telescópica Leupold estándar. En condiciones de iluminación deficiente la iluminación de la retícula permite diferenciar mejor entre el objetivo y la posición exacta del punto de mira.

Para iluminar la retícula:

1. Sujete el cuadrante de iluminación ubicado en la parte superior del cuerpo del ocular.

2. Gire a la derecha el cuadrante desde la posición de apagado (OFF) hasta el primer número indicado en el mismo.

3. Observe el objetivo a través de la mira telescópica para determinar si la retícula es lo suficientemente brillante como para destacarse con claridad con respecto al objetivo.

4. Si se requiere más iluminación, continúe girando a la derecha el cuadrante hasta que la retícula quede claramente visible con respecto al objetivo.

Para conservar la vida útil de la pila, no se olvide de apagar (OFF) el cuadrante iluminado cuando la mira telescópica no esté en uso. Para el almacenamiento prolongado, saque la pila.

Si la retícula no se ilumina o aparece opaca aun al seleccionar el máximo valor de iluminación, será necesario cambiar la pila.

– Advertencia –

Siempre cerciórese de que el arma de fuego esté descargada antes de cambiar la pila de la mira telescópica.

LE SUGERIMOS LEER LA TOTALIDAD DE ESTE MANUAL ANTES DE INSTALAR LA MIRA TELESCÓPICA.

– Precaución –

Siempre verifique y cerciórese de que el arma de fuego esté descargada antes de realizar trabajo alguno en dicha arma.

CÓMO ESTABLECER LA DISTANCIA DE LA MIRA TELESCÓPICA PARA EVITAR LA FATIGA OCULAR DURANTE EL USO DE RIFLES Y ESCOPETAS

Debido las consideraciones de seguridad asociadas con las técnicas utilizadas para establecer la separación entre ojo y mira para evitar la fatiga ocular, Leupold recomienda enfáticamente la instalación de la mira telescópica lo más

adelante posible en el arma. Además de lo anterior, siga estos pasos:

1. Con la mira telescópica en la posición más avanzada posible sobre la base de montaje, sujete el rifle en la posición normal de tiro. (Para este proceso se recomienda ajustar las miras de amplificación variable en la máxima posición de aumento).

2. Desplace lentamente la mira telescópica hacia atrás justo hasta obtener un campo visual completo.

3. Coloque la mira telescópica aquí para reducir al mínimo la fatiga ocular.

4. Continúe para TERMINAR LA INSTALACIÓN.

NOTA: *Para confirmar que su mira telescópica esté instalada en la mejor posición posible, pruebe varias posiciones: de rodillas, sentado, tendido y apuntando con ángulo ascendente o descendente. No se olvide que al apuntar con un ángulo ascendente normalmente se reduce la fatiga ocular. Se recomienda el uso de ropa especial para cacería/ tiro ya que esto puede modificar levemente las consideraciones de reducción de fatiga ocular.*

– Advertencia –

Si una mira telescópica se coloca demasiado atrás, el visor puede lesionar la ceja del tirador. Al disparar en ángulo ascendente también se aumenta este riesgo porque se reduce la distancia entre la ceja y la parte posterior de la mira telescópica. Por este motivo, las miras telescópicas Leupold están diseñadas para evitar al máximo la fatiga ocular.

Por lo tanto, al instalar su mira telescópica, le recomendamos colocarla en la posición más adelantada posible sobre la base de montaje a fin de aprovechar al máximo esta ventaja práctica para la reducción de la fatiga ocular.

PARA TERMINAR LA INSTALACIÓN

1. Sin perturbar la posición óptima para evitar la fatiga visual, gire la mira telescópica hasta que el cuadrante de ajuste de elevación se encuentre en la parte superior de la mira telescópica.

2. Desde una posición de tiro, verifique que la línea vertical de la retícula esté alineada con el eje vertical del arma de fuego.
La desalineación no afectará la exactitud a distancias moderadas pero puede reducir la precisión de largo alcance.

3. Cuando la alineación sea de su satisfacción, apriete los tornillos de manera uniforme y segura.

CÓMO ENFOCAR LA RETÍCULA

Fije la mira telescópica y el arma de fuego en un apoyo firme. Apunte de manera segura la mira telescópica a un objeto con fondo de color claro. Con la mira a aproximadamente a cuatro pulgadas de su ojo, la retícula debe aparecer nítida y bien definida; de lo contrario, será necesario ajustar el enfoque por medio del ocular.

Si su mira Leupold es uno de nuestros modelos con un ocular que viene con un anillo de sujeción, siga estos pasos sencillos:

1. Sujete el ocular con la mano y retrocédalo para desprenderlo del anillo de sujeción. Después que el anillo de sujeción esté libre del ocular, gírelo a la derecha para alejarlo del ocular y apartarlo durante el ajuste.

2. Si usted tiende a alejar los objetos para verlos con mayor claridad (hipermetropía) gire a la izquierda el ocular un par de vueltas.
Si usted tiende a acercar los objetos para verlos con mayor claridad (miopía) gire a la derecha el ocular un par de vueltas.

3. Al ver a través de la mira telescópica cuando ésta apunta hacia las nubes,

dé unos vistazos a la retícula. El enfoque de la retícula debe ser considerablemente diferente al que tenía cuando comenzó. Continúe este proceso hasta que la retícula aparezca clara y nítida.

4. Cuando la imagen de la retícula sea satisfactoria, gire el anillo de sujeción de manera que éste se apoye firmemente contra el ocular.

NOTA*: A fin de proteger la integridad del sello hermético de cada mira telescópica Leupold Golden Ring, un mecanismo interno impide el desmontaje del ocular.*

CÓMO REALIZAR AJUSTES DE PRECISIÓN POR EFECTO DEL VIENTO Y DE LA ELEVACIÓN

El estilo de los ajustes de elevación y corrección por efectos del viento (deriva) en las miras telescópicas Leupold varía con los modelos específicos. Sin embargo, cada una viene claramente marcada con incrementos de fácil lectura. Si por ejemplo, hay cuatro marcas de referencia desde cero hasta el número uno en una perilla de ajuste (ambos valores inclusive), entonces el valor de cada incremento de ajuste en dicha perilla es de 1/4 de MOA. Esta convención es la misma en todos los cuadrantes de ajuste Leupold. Una unidad MOA (o minuto de ángulo) mueve 1 pulgada el punto de impacto a 100 yardas. O bien 29 mm a 100 metros.

Las letras que se encuentran en los cuadrantes de corrección por efecto del viento y de elevación se refieren a la dirección a la que se desplaza el punto de impacto del proyectil cuando se realiza un ajuste.

AJUSTES DE PRECISIÓN POR EFECTO DEL VIENTO Y DE LA ELEVACIÓN EN MIRAS TELESCÓPICAS VX®-7 RIFLESCOPES (SPEEDIAL™)

La cubierta de ajuste está integrada al mecanismo de ajuste. Si desea efectuar una corrección, sencillamente gire la cubierta de ajuste hacia la izquierda hasta que ésta "salte", y revele completamente las marcas de indicación de ajuste, y entonces realice la corrección apropiada. Para fijar la cubierta de ajuste, haga presión hacia abajo a la vez que aprieta la cubierta.

AJUSTES DE PRECISIÓN POR EFECTO DEL VIENTO Y DE LA ELEVACIÓN EN MIRAS TELESCÓPICAS DE TIRO AL BLANCO Y TÁCTICAS

Las miras telescópicas Leupold de tiro al blanco, de competición y la mayoría de miras telescópicas tácticas tienen ajustes de precisión estilo micrométrico por efecto del viento y de la elevación.

Se puede escuchar y sentir un clic por cada marca de ajuste lo cual permite realizar los ajustes a la mira telescópica sin necesidad de ver los cuadrantes. Los indicadores en la porción del micrómetro del cuadrante muestran el número completo de giros de 360° que se hayan realizado.

AJUSTE A CERO DE LOS CUADRANTES DE CORRECCIÓN POR EFECTO DEL VIENTO Y DE ELEVACIÓN DESPUÉS DE APUNTAR CON LA MIRA

Todas las miras telescópicas Leupold incluyen cuadrantes de ajuste que se pueden volver a colocar para alinear la marca de cero del cuadrante con el indicador de posición sin cambiar el valor de ajuste de la mira. Lo anterior permite al tirador conocer el cero original en el rifle en caso de que sea necesario realizar ajustes adicionales en el campo. Para volver a colocar los cuadrantes en los modelos Rifleman®, VX®-I, y FX™-I, coloque una moneda o un destornillador en la ranura del cuadrante numerado y gire dicho cuadrante de manera que el cero quede alineado con la marca indicadora de línea estampada en la parte superior del tornillo de ajuste que es perpendicular a la ranura para la moneda.

Los modelos VX-II y FX-II tienen un cuadrante apuntador que se mueve con la ranura de ajuste. El cuadrante también se puede mover independientemente para alinearse con el cero en el cuadrante más externo. Para volver a colocar este cuadrante sencillamente gírelo hasta que el apuntador quede alineado con el cero. Los modelos VX-3 y FX-3 tienen un cuadrante indicador que se puede mover independientemente para alinearse con el cero en el cuadrante de ajuste. Para volver a colocar este cuadrante gírelo simplemente hasta que la muesca indicadora de posición quede alineada con el cero del cuadrante de ajuste.

Para volver a colocar los cuadrantes en los modelos VX-7:

1. Desenrosque la cubierta de ajuste hasta que ésta "salte", y revele completamente las marcas de indicación de ajuste y los tornillos prisioneros.

2. Afloje los tornillos prisioneros que rodean la parte superior de la porción del cuadrante.

3. Mueva a mano el cuadrante del cilindro para alinear el cero con la marca blanca perpendicular en la base del cilindro.

4. Apriete los tornillos prisioneros.

Para volver a colocar los cuadrantes en los modelos Target (de tiro al blanco) y Tactical (tácticos):

1. Afloje los tornillos prisioneros alrededor de la parte superior de la perilla hasta que el cilindro gire libremente.

2. Mueva a mano el cuadrante del cilindro para alinear el cero con la marca blanca perpendicular en la base del cilindro.

3. Apriete los tornillos prisioneros hasta que el cilindro quede seguro.

CENTRADO DE AJUSTES DE CORRECCIÓN POR EFECTO DEL VIENTO Y DE LA ELEVACIÓN PARA LOGRAR UN DESPLAZAMIENTO DE AJUSTE ÓPTIMO

Al hacer ajustes de corrección por efecto del viento y de la elevación se desplaza la totalidad del sistema erector horizontal y verticalmente en la mira telescópica. Si este sistema está desviado hacia un lado – como resultado de haberlo instalado sobre una base de montaje no ajustable – los ajustes no proporcionarán un desplazamiento equivalente en todas las direcciones. Para recuperar el desplazamiento completo y equilibrado, será necesario volver a centrar el ajuste de la manera siguiente:

1. Gire el ajuste de corrección por efecto del viento hasta que éste tope.

2. Contando los "clic" o las marcas de referencia, gírelo completamente en la otra dirección.

3. Gire el cuadrante retrocediendo la mitad de la cantidad de "clic" o marcas de referencia contadas.

4. Repita este proceso para el ajuste de elevación.

CÓMO USAR LA RETÍCULA ILUMINADA

Todas las miras telescópicas de Leupold con retículas iluminadas se pueden utilizar en estado estándar o en estado iluminado. Al no estar iluminada, la retícula funciona de la misma manera que la retícula en una mira telescópica Leupold estándar. En condiciones de iluminación deficiente la iluminación de la retícula permite diferenciar mejor entre el objetivo y la posición exacta del punto de mira.

Para iluminar la retícula:

1. Sujete el cuadrante de iluminación ubicado en la parte superior del cuerpo del ocular.

2. Gire a la derecha el cuadrante desde la posición de apagado (OFF) hasta el primer número indicado en el mismo.

3. Observe el objetivo a través de la mira telescópica para determinar si la retícula es lo suficientemente brillante como para destacarse con claridad con

respecto al objetivo.

4. Si se requiere más iluminación, continúe girando a la derecha el cuadrante hasta que la retícula quede claramente visible con respecto al objetivo.

Para conservar la vida útil de la pila, no se olvide de apagar (OFF) el cuadrante iluminado cuando la mira telescópica no esté en uso. Para el almacenamiento prolongado, saque la pila.

Si la retícula no se ilumina o aparece opaca aun al seleccionar el máximo valor de iluminación, será necesario cambiar la pila.

– Advertencia –

Siempre cerciórese de que el arma de fuego esté descargada antes de cambiar la pila de la mira telescópica.

SERVICIO DE PRODUCTOS LEUPOLD

Si su mira telescópica Leupold Golden Ring no funciona de la manera esperada, puede devolverla directamente a la fábrica (o a uno de nuestros centros internacionales de servicio) para su reparación. No es necesario que su concesionario envíe la mira telescópica a Leupold; sin embargo, ellos pueden ser muy útiles para determinar si es necesario repararla en la fábrica. Le sugerimos atender las siguientes instrucciones de envío:

1. Retire los anillos y otros accesorios de la mira telescópica.

2. Registre el número de serie de la mira telescópica y consérvelo para referencia futura.

3. Incluya una nota con su nombre, dirección, número de teléfono, correo electrónico y una descripción del problema.

4. Empaque la mira telescópica en la caja original (si aún la conserva), ya que éste es el embalaje más seguro para el envío. Envuelva bien el paquete con cinta de embalaje reforzada con filamentos en el exterior del paquete.

5. Envíe la mira telescópica por servicio de entrega de paquetes o de correo (con cobertura de seguro si fuese posible) a una de las siguientes direcciones:

En los Estados Unidos:

Servicio de entrega de paquetes:
Leupold Product Service 14400 NW Greenbrier Parkway
Beaverton, OR 97006-5790 USA

Por correo:

Leupold Product Service P.O. Box 688
Beaverton, OR 97075-0688 USA

Fuera de los Estados Unidos:

Canadá: Korth Group Ltd., 103 Stockton Point, Box 490
Okotoks, AB T1S 1A7, Canada

Alemania: Harold Ros, Coburger Strasse 71, 98673 Eisfeld, Germany

Suecia: HDF Gyttorp Jakt AB, Svarvaregatan 5,
S-302 50 Halmstad, Sweden

Nuestros números telefónicos de Servicio de Productos son **(503) 526-1400** o **(800) LEUPOLD (538-7653)**, el fax es **(503) 352-7621**. También puede comunicarse con ellos a través de nuestro sitio Web en **www.leupold.com**.

BITTE DAS GESAMTE HANDBUCH LESEN, BEVOR DAS FERNROHR MONTIERT WIRD.

– Achtung –

Vor dem Arbeiten an der Schusswaffe stets überprüfen und gewährleisten, dass die Schusswaffe entladen ist.

AUGENABSTAND BEI GEWEHREN UND FLINTEN

Aufgrund der mit einem korrekten Augenabstand verbundenen Sicherheitserwägungen empfiehlt Leupold dringend, das Zielfernrohr so weit wie möglich vom Auge entfernt zu montieren.

Darüber hinaus gehen Sie wie folgt vor:

1. Das Gewehr bei so weit vorne wie möglich montiertem Zielfernrohr in normaler Schussposition halten. (Zielfernrohre mit variabler Vergrößerung müssen für diesen Vorgang auf die höchste Vergrößerungseinstellung eingestellt werden.)
2. Das Zielfernrohr langsam nach hinten bewegen, bis Sie ein volles Blickfeld erhalten.
3. Das Zielfernrohr hier fixieren, um den maximalen Augenabstand zu gewährleisten.
4. Mit INSTALLATION ABSCHLIESSEN fortfahren.

HINWEIS: *Um zu bestätigen, dass Ihr Zielfernrohr in der optimalen Position montiert ist, verschiedene Positionen einnehmen: kniend, sitzend, bäuchlings und in einem Aufwärts- als auch Abwärtswinkel. Das Zielen in einem Aufwärtswinkel reduziert meist den Augenabstand. Das Tragen von Jagd-/Schießstand-spezifischer Kleidung wird empfohlen, da dies die Augenabstanderwägungen beträchtlich verändern kann.*

– Warnung –

Wird ein Zielfernrohr zu weit hinten montiert, besteht die Gefahr, dass das Okular den Schützen an der Braue verletzt. Schießen in einem Aufwärtswinkel erhöht diese Gefahr, weil dabei der Abstand zwischen der Braue und dem Okular des Zielfernrohrs verkürzt wird. Leupold Zielfernrohre sind aus diesem Grund mit großzügigem Augenabstand konzipiert. Leupold empfiehlt, dass Sie das Zielfernrohr so weit vorne wie möglich montieren, um in den Genuss aller Vorteile dieses großzügigen Augenabstands zu kommen.

INSTALLATION ABSCHLIESSEN

1. Das Zielfernrohr ohne die Position mit optimalem Augenabstand zu stören, drehen, bis die Höheneinstellungs-Skalenscheibe sich am Zielfernrohr oben befindet.
2. Aus einer Feuerposition überprüfen, dass der vertikale Faden des Absehens mit der vertikalen Achse der Schusswaffe ausgerichtet ist. Eine falsche Ausrichtung wirkt sich bei mäßigen Entfernungen zwar nicht auf die Zielgenauigkeit aus. Bei langen Entfernungen können jedoch Abweichungen auftreten.
3. Wenn Sie zufrieden sind, die Ringschrauben gleichmäßig und sicher festziehen.

SCHARFSTELLEN DES ABSEHENS

Bringen Sie die Waffe mit dem Zielfernrohr in einen festen Halt. Richten Sie das Zielfernrohr auf ein Hintergrundobjekt heller Farbe. Bei einem Abstand von ungefähr 10 cm zwischen Zielfernrohr und Ihrem Auge sollte das Absehen gestochen scharf sein. Wenn dies nicht der Fall ist, muss der Fokus über das Okular verstellt werden.

Handelt es sich bei Ihrem Leupold-Zielfernrohr um eines der Modelle mit einem Okular mit Feststellring, die folgenden einfachen Schritte durchführen:

1. Greifen Sie das Okular mit der Hand und ziehen Sie es nach hinten vom Feststellring weg. Wenn der Feststellring vom Okular getrennt ist, drehen Sie ihn im Uhrzeigersinn vom Okular weg drehen, so dass er beim Verstellen nicht im Weg ist.
2. Wenn Sie eine Tendenz haben, Dinge von sich weg zu halten, um sie scharf zu sehen (Weitsichtigkeit), drehen Sie das Okular einige Umdrehungen gegen den Uhrzeigersinn. Wenn Sie Dinge nahe halten, um sie scharf zu sehen (Kurzsichtigkeit), drehen Sie das Okular einige Umdrehungen im Uhrzeigersinn.
3. Richten Sie das Zielfernrohr in den Himmel und prüfen Sie das Absehen einige Male. Die Schärfe des Absehens sollte merkbar anders sein als zu Beginn. Setzen Sie dieses Verfahren fort, bis das Absehen gestochen scharf ist.
4. Wenn Sie mit dem Absehenbild zufrieden sind, schieben Sie den Feststellring zurück, so dass dieser fest am Okular anliegt.

HINWEIS*: Um die Integrität der wasserdichten Versieglung aller Leupold Golden Ringscope-Fernrohre zu schützen, verhindert ein interner Mechanismus, dass das Okular entfernt wird.*

PRÄZISE WINDABDRIFT- UND HÖHENEINSTELLUNGEN

Die Art der Höhen- und Windabdrifteinstellungen für Leupold-Zielfernrohre variiert je nach Modell. Jedes Modell ist aber deutlich und in gut leserlichen Inkrementen markiert. Wenn z. B. vier Rautensymbole von Null bis einschließlich der Nummer 1 an einem Einstellknopf vorliegen, ist der Wert jedes Inkrements an diesem Knopf 1/4-MOA. Dies ist bei allen Leupold-Skalenscheiben identisch. 1-MOA verschiebt den Treffpunkt bei 100 Metern um 29 mm.

Die Buchstaben an den Skalenscheiben für die Windabdrift- und Höheneinstellung beziehen sich auf die Richtung, in die der Treffpunkt des Geschosses bei Vornahme einer Einstellung verschoben wird.

WINDABDRIFT- UND HÖHENEINSTELLUNG AN VX®-7 ZIELFERNROHREN (SPEEDIAL™)

Die Einstellungsabdeckung ist ein integraler Bestandteil des Einstellmechanismus. Um eine Korrektur vorzunehmen, einfach die Einstellungsabdeckung gegen den Uhrzeigersinn drehen, bis sie „hochspringt" und die Einstellungsmarkierungen zugänglich sind.
Dann nehmen Sie die jeweilige Korrektur vor. Um die Einstellungsabdeckung wieder zu befestigen, während des Festziehens der Abdeckung nach unten drücken.

WINDABDRIFT- UND HÖHENEINSTELLUNGEN AN ZIELSCHEIBEN- UND SCHARFSCHÜTZEN-MODELLEN

Die Zielscheiben- und Scharfschützen-Zielfernrohre von Leupold weisen Mikrometerskalen für Windabdrift- und Höhenverstellung auf.

Der bei jeder Verstellung erzeugte Klick ist sowohl hörbar als auch spürbar, was Zielfernrohrverstellungen ermöglicht, ohne auf die Skalenscheiben zu schauen. Anzeiger auf den Mikrometerbereichen der Skalenscheiben zeigen die Anzahl der vollständig durchgeführten 360°-Umdrehungen an.

WINDABDRIFT- UND HÖHENSKALENSCHEIBEN NACH DEM EINVISIEREN AUF NULL ZURÜCKSTELLEN

Alle Zielfernrohre von Leupold weisen Skalenscheiben auf, die neu positioniert werden können, um die markierte Nulleinstellung der Skalenscheibe mit dem Positionsanzeiger auszurichten, ohne die Einstellung des Zielfernrohrs zu verändern. Dadurch kennt der Schütze in dem Falle, dass im Feld weitere Einstellungen notwendig werden, die Originalnulleinstellung der Waffe. Um die Skalenscheiben an

den Modellen Rifleman®, VX®-I und FX™-I neu zu positionieren, eine Münze oder einen Schraubendreher in den Schlitz in der nummerierten Skalenscheibe stecken und die Scheibe so drehen, dass die Null mit der eingeprägten Linienmarke oben an der Einstellschraube ausgerichtet wird, die zum Münzenschlitz senkrecht steht.

Die Modelle VX-II und FX-II weisen eine Zeigerskalenscheibe auf, die mit dem Einstellschlitz bewegt wird. Diese Skalenscheibe kann auch unabhängig bewegt werden, um mit der Null an der äußersten Skala ausgerichtet zu werden. Um diese Skalenscheibe neu zu positionieren, drehen Sie einfach, bis der Zeiger mit der Null ausgerichtet ist. Die Modelle VX-3 und FX-3 weisen eine Anzeigerskalenscheibe auf, die unabhängig bewegt werden kann, um mit der Null an der Skalenscheibe ausgerichtet zu werden. Um diese Skalenscheibe neu zu positionieren, einfach drehen, bis die Positionsanzeiger-Einkerbung mit der Null an der Skalenscheibe ausgerichtet ist.

So werden die Skalenscheiben an VX-7 Zielfernrohren neu positioniert:

1. Einstellungsabdeckung aufschrauben, bis sie „hochspringt“ und die Einstellungsmarkierungen und Stellschrauben zugänglich sind.
2. Die Stellschrauben, die die Oberseite des Skalenscheibenteils umgeben, lösen.
3. Die zylinderförmige Skalenscheibe von Hand verschieben, um die Null mit der goldenen Markierung an der Zylinderbasis auszurichten.
4. Stellschrauben festziehen.

So werden die Skalenscheiben an Zielscheiben- und Scharfschützenmodellen neu positioniert:

1. Die Stellschrauben, welche die Oberseite des Knopfs umgeben, lösen, bis sich der Zylinder ungehindert drehen lässt.
2. Die zylinderförmige Skalenscheibe von Hand verschieben, um die Null mit der weißen Senkrechtmarkierung an der Zylinderbasis auszurichten.
3. Die Stellschrauben festziehen, bis der Zylinder fest sitzt.

ZENTRIEREN DER WINDABDRIFT- UND HÖHENEINSTELLUNGEN ZU ERZIELUNG EINES OPTIMALEN EINSTELLWEGS

Durch Vornehmen der Windabdrift- und Höheneinstellungen wird das gesamte Umkehrlinsensystem im Inneren des Zielfernrohrs horizontal und vertikal verschoben. Ist das Umkehrlinsensystem auf einer Seite falsch ausgerichtet, weil es an einer nicht einstellbaren Befestigung angebracht wurde, bieten die Einstellungen keinen ausreichenden Bewegungsweg in alle Richtungen. Um einen ganz ausgeglichenen Weg zu erzielen, muss die Einstellung wie folgt neu zentriert werden:

1. Windabdrifteinstellung auf den Punkt drehen, an dem sie sich nicht weiter bewegt.
2. Die Klicks oder Rautensymbole zählen und ganz in die andere Richtung drehen.
3. Die Skalenscheibe um die Hälfte der gezählten Klicks oder Rautensymbole zurückdrehen.
4. Dieses Verfahren für die Höheneinstellung wiederholen.

VERWENDUNG EINES BELEUCHTETEN ABSEHENS

Alle Leupold-Zielfernrohre mit beleuchtetem Absehen können entweder im Normalzustand oder im beleuchteten Zustand verwendet werden. Ist das Absehen nicht beleuchtet, funktioniert es genauso wie das in einem Standardzielfernrohr von Leupold. Durch Beleuchtung des Absehens kann bei schlechten Lichtverhältnissen besser zwischen dem Ziel und der präzisen Position des Zielpunkts unterschieden werden.

So wird das Absehen beleuchtet:

1. Greifen Sie die Beleuchtungsstellschreibe, die sich oben an der

Okularschale befindet.

2. Drehen Sie die Scheibe im Uhrzeigersinn von der Position OFF (Aus) auf die erste Skalenscheibennummer.

3. Betrachten Sie das Ziel durch das Zielfernrohr, um zu bestimmen, ob das Absehen hell genug ist, um vor dem Ziel hervorgehoben zu werden.

4. Muss es heller beleuchtet werden, drehen Sie die Scheibe weiter im Uhrzeigersinn, bis das Absehen vor dem Ziel deutlich erkennbar ist.

Um Batterie zu sparen, sollten Sie die Beleuchtungsscheibe immer auf OFF (Aus) stellen, wenn das Zielfernrohr nicht verwendet wird. Wird es für längere Zeit nicht verwendet, nehmen Sie die Batterie heraus.

Wird das Absehen nicht beleuchtet oder ist es auch bei der höchsten Beleuchtungseinstellung dunkel, muss die Batterie ausgewechselt werden.

WARNUNG*: Vor dem Auswechseln der Batterie im Zielfernrohr stets überprüfen, dass die Waffe entladen ist.*

LEUPOLD TECHNISCHER KUNDENDIENST

Wenn die Leistung des Leupold Golden Ring Zielfernrohrs in irgendeiner Weise beeinträchtigt ist, können Sie es zwecks Reparatur direkt ans Werk (oder an ein internationales Kundendienstzentrum) senden. Es ist nicht erforderlich, dass der Fachhändler das Zielfernrohr an Leupold sendet, doch kann dieser beim Bestimmen, ob eine Werksüberarbeitung erforderlich ist, sehr hilfreich sein. Bitte beachten Sie die folgenden Versandanweisungen:

1. Entfernen Sie Ringe und anderes Zubehör vom Zielfernrohr.

2. Notieren Sie sich die Seriennummer des Zielfernrohrs und bewahren Sie die Notiz auf.

3. Legen Sie dem Paket eine Notiz mit den folgenden Informationen bei: Name, Adresse, Telefonnummer, E-Mail-Adresse und Beschreibung des Problems.

4. Packen Sie das Zielfernrohr nach Möglichkeit in die Originalverpackung oder einen anderen geeigneten, festen Versandkarton ein. Umwickeln Sie das Paket außen gut mit Paketklebeband.

5. Senden Sie das Zielfernrohr per Paketdienst oder Post (wenn möglich versichert) an eine der folgenden Adressen:

In den USA:

Paketdienst:
Leupold Product Service 14400 NW Greenbrier Parkway
Beaverton, OR 97006-5790 USA

Per Post:
Leupold Product Service P.O. Box 688
Beaverton, OR 97075-0688 USA

Außerhalb der USA:

Kanada: Korth Group Ltd., 103 Stockton Point, Box 490
Okotoks, AB T1S 1A7, Kanada

Deutschland: Harold Ros, Coburger Straße 71, 98673 Eisfeld, Deutschland

Schweden: HDF Gyttorp Jakt AB, Svarvaregatan 5,
S-302 50 Halmstad, Schweden

Die Rufnummer des technischen Kundendiensts in den USA lautet **(+1) 503 526-1400** oder **(+1) 800 LEUPOLD (538-7653)**. Der technische Kundendienst kann auch per Fax unter der Faxnummer **(+1) 503 352-7621** bzw. über unsere Website **www.leupold.com** in Anspruch genommen werden.

LEGGERE L'INTERO MANUALE PRIMA DI MONTARE IL CANNOCCHIALE DI MIRA.

– Attenzione –

Prima di iniziare qualsiasi lavoro sull'arma da fuoco, controllarla e accertarsi che sia scarica.

DISTANZA TRA OCULARE E OCCHIO SUI FUCILI

Date le considerazioni di sicurezza connesse a una corretta distanza dell'oculare dall'occhio, la Leupold raccomanda caldamente di montare il cannocchiale nella posizione più avanzata possibile. Eseguita l'operazione, procedere come segue:

1. Con il cannocchiale montato nella posizione più avanzata possibile, tenere il fucile nella propria normale posizione di sparo. (Per questa procedura i cannocchiali a ingrandimento variabile vanno regolati al massimo ingrandimento).
2. Far scorrere lentamente all'indietro il cannocchiale, fermandosi appena il campo visivo è completo.
3. Fissare il cannocchiale in tal punto per avere la massima distanza dell'oculare dall'occhio.
4. COMPLETARE IL MONTAGGIO.

NOTA*: Per avere la conferma che il cannocchiale è montato nella migliore posizione possibile, provare varie posizioni: in ginocchio, seduti, proni, e puntare sia verso l'alto, sia verso il basso. Ricordarsi che quando si punta verso l'alto di norma si riduce la distanza dell'oculare dall'occhio. Per questa operazione si consiglia di indossare indumenti da caccia/poligono in quanto potrebbero contribuire ad alterare leggermente le considerazioni sulla distanza dell'oculare dall'occhio.*

– Avvertenza –

Se il cannocchiale è montato troppo indietro, l'oculare può ferire la fronte del tiratore in corrispondenza delle sopracciglia. Quando si spara verso l'alto si aumenta questo pericolo perché si diminuisce la distanza tra il sopracciglio e la parte posteriore del cannocchiale. Per questa ragione, i cannocchiali Leupold sono progettati in modo da consentire una notevole distanza dell'occhio dall'oculare. Raccomandiamo, quindi, durante il montaggio del cannocchiale, di posizionarlo sui supporti quanto più possibile in avanti, in modo da sfruttare al meglio tale caratteristica costruttiva.

COMPLETAMENTO DEL MONTAGGIO

1. Senza alterare la distanza ottimale dell'oculare dall'occhio, ruotare il cannocchiale finché la manopola graduata di regolazione dell'elevazione è nella parte superiore del cannocchiale.
2. Dalla posizione di sparo, controllare e assicurarsi che l'incisione verticale del reticolo sia allineata con l'asse verticale dell'arma da fuoco. Un cattivo allineamento non influirà sulla precisione a distanze modeste, ma può diminuire la precisione a lunghe distanze.
3. Quando si è soddisfatti, serrare bene le viti dei collari in modo uniforme.

MESSA A FUOCO DEL RETICOLO

Assicurare il cannocchiale e l'arma da fuoco in un sostegno stabile. Puntare con sicurezza il cannocchiale verso un oggetto che abbia uno sfondo di colore chiaro. Col cannocchiale posto a circa 10 cm dall'occhio, il reticolo dovrebbe apparire nitido e ben definito. Se non lo è, regolare la messa a fuoco agendo sull'oculare.

Se il proprio modello di cannocchiale Leupold è uno di quelli munito di ghiera di bloccaggio, seguire questi semplici passi:

1. Afferrare con la mano l'oculare e tirarlo indietro per allontanarlo dalla ghiera. Quando la ghiera di bloccaggio è libera dall'oculare, girarla in senso orario, allontanandola dall'oculare, per non ostacolare la regolazione.
2. Se si ha la tendenza ad allontanare le cose per vederle meglio (presbiopia) ruotare l'oculare in senso antiorario di un paio di giri. Se invece si tengono le cose più vicino agli occhi per vederle meglio (miopia) ruotare di un paio di giri l'oculare in senso orario.
3. Mentre si guarda attraverso il cannocchiale puntato verso il cielo, dare alcune rapide occhiate al reticolo. Ci dovrebbero essere delle differenze notevoli nella messa a fuoco del reticolo rispetto a prima. Continuare finché il reticolo appare chiaro e ben definito.
4. Quando si è soddisfatti dell'immagine del reticolo, ruotare la ghiera di bloccaggio in modo da farla appoggiare saldamente contro l'oculare.

NOTA*: Per proteggere la tenuta stagna, ogni cannocchiale di mira Leupold Golden Ringscope è munito di un dispositivo interno che impedisce il distacco dell'oculare dal cannocchiale.*

MESSA A PUNTO PRECISA DELLA DERIVAZIONE E DELL'ELEVAZIONE

Le modalità di regolazione dell'elevazione e della derivazione per i cannocchiali di mira Leupold per fucili cambiano a seconda del modello. Ogni regolazione è tuttavia eseguita con incrementi di facile lettura. Se, per esempio, vi sono quattro tacche da zero a uno (compreso) sulla manopola di regolazione, il valore di ogni regolazione, con quella manopola, è pari a 1/4 di minuto d'angolo. Lo stesso vale per tutte le manopole di regolazione Leupold. Un minuto d'angolo sposta il punto di impatto di 1 pollice a 100 iarde. A 100 metri, lo sposta di 29 mm.

Le lettere sulle manopole di regolazione della derivazione e dell'elevazione indicano la direzione in cui si sposta il punto d'impatto del proiettile quando si esegue una regolazione.

REGOLAZIONE DELLA DERIVAZIONE E DELL'ELEVAZIONE NEL CANNOCCHIALE DA PUNTAMENTO VX®-7 PER FUCILI (SPEEDIAL™)

Il coperchio della regolazione fa parte del meccanismo di quest'ultima. Se si desidera fare una correzione è sufficiente ruotare in senso antiorario il coperchio fino a quando "esce" esponendo le tacche indicatrici. Quindi, fare la correzione desiderata. Per fissare il coperchio è sufficiente spingerlo verso il basso mentre lo si serra.

REGOLAZIONE DELLA DERIVAZIONE E DELL'ELEVAZIONE SUI CANNOCCHIALI TATTICI E DA PUNTAMENTO

I cannocchiali Leupold Target e Competition (da puntamento e da gara), nonché la maggior parte di quelli di modello Tactical (tattici), sono dotati di dispositivi di regolazione della derivazione e dell'elevazione in stile micrometro.

Ad ogni regolazione si sente e si avverte uno scatto. Pertanto, le regolazioni dei cannocchiali possono essere fatte anche senza guardare le manopole graduate. Gli indicatori montati sulla parte in stile micrometro della manopole graduate indicano il numero di rotazioni a 360° che si sono fatte.

AZZERAMENTO DELLE MANOPOLE DI DERIVAZIONE E DI ELEVAZIONE DOPO LA TARATURA INIZIALE

I cannocchiali Leupold sono dotati di manopole graduate che possono essere riposizionate per allineare la tacca zero della manopola con l'indicatore di posizione senza dover cambiare la regolazione del cannocchiale. In questo modo il tiratore conosce lo zero originale del fucile, utile qualora fosse necessario eseguire ulteriori regolazioni su campo. Per riposizionare le manopole sui modelli Rifleman®, VX®-I, e FX™-I: inserire una moneta o un cacciavite nella scanalatura del quadrante numerato e ruotarlo fino ad allineare lo zero con la linea di riferimento impressa sulla parte superiore della vite di regolazione che è perpendicolare alla scanalatura per la moneta.

I modelli VX-II e FX-II sono muniti di un quadrante indicatore solidale con la scanalatura di regolazione. Anche tale quadrante può essere spostato indipendentemente per l'allineamento con lo zero della graduazione esterna. Per riposizionarlo è sufficiente ruotarlo finché l'indicatore è allineato con lo zero. I modelli VX-3 e FX-3 hanno un quadrante indicatore che può essere spostato indipendentemente per l'allineamento con lo zero della graduazione di regolazione. Per riposizionarlo è sufficiente ruotarlo finché la tacca indicatrice di posizione è allineata con lo zero della graduazione di regolazione.

Per riposizionare le manopole graduate sui cannocchiali VX-7:

1. Svitare il coperchio di regolazione fino a quando "esce" mettendo bene in vista le tacche di regolazione e i grani.
2. Allentare i grani situati intorno alla parte superiore del quadrante.
3. Spostare a mano il cilindro graduato fino ad allineare lo zero con la tacca dorata alla base del cilindro.
4. Serrare i grani.

Riposizionamento dei quadranti dei modelli Target e Tactical:

1. Allentare i grani situati sulla corona esterna della parte superiore della manopola finché il cilindro ruota liberamente.
2. Spostare a mano il cilindro graduato fino ad allineare lo zero con la tacca bianca perpendicolare alla base del cilindro.
3. Serrare i grani fino al bloccaggio del cilindro.

CENTRATURA DELLE REGOLAZIONI DI DERIVAZIONE E DI ELEVAZIONE PER CONSEGUIRE LA MASSIMA CORSA DI REGOLAZIONE

Le regolazioni di derivazione e di elevazione spostano l'intero sistema raddrizzatore in senso orizzontale e verticale all'interno del cannocchiale. Se il sistema raddrizzatore è spostato su un lato — a causa del montaggio su un supporto non regolabile — le regolazioni non produrranno la stessa corsa in tutti i sensi. Per ristabilire una corsa completamente equilibrata, occorre ricentrare le regolazioni:

1. Ruotare la regolazione di derivazione fino all'arresto.
2. Ruotare completamente in senso opposto contando gli scatti o le tacche.
3. Ruotare la manopola in senso opposto per la metà degli scatti o delle tacche contati.
4. Ripetere la procedura per la regolazione dell'elevazione.

USO DEL RETICOLO ILLUMINATO

Tutti i cannocchiali di mira Leupold con reticolo illuminato possono essere usati con o senza illuminazione. Quando non è illuminato, il reticolo si comporta come il reticolo dei cannocchiali standard Leupold. L'illuminazione del reticolo consente di distinguere meglio il preciso punto di mira sul bersaglio in condizioni di luce scarsa.

Per illuminare il reticolo:

1. Afferrare la manopola di illuminazione posta sopra l'involucro dell'oculare.

2. Girare la manopola in senso orario dalla posizione di OFF (spento) al primo numero indicato sul quadrante.

3. Osservare il bersaglio attraverso il cannocchiale per stabilire se il reticolo è abbastanza luminoso da spiccare chiaramente sul bersaglio.

4. Se occorre una maggiore illuminazione, continuare a ruotare la manopola in senso orario fin quando il reticolo è chiaramente visibile sul bersaglio.

Per salvaguardare la durata della batteria, ricordarsi di ruotare sempre la manopola di illuminazione sulla posizione OFF (spento) quando non si usa il cannocchiale. Togliere la batteria se si prevede una prolungata inattività.

Se il reticolo non si illumina o appare debolmente illuminato anche al massimo della regolazione, significa che occorre sostituire la batteria.

– Avvertenza –

Prima di sostituire la batteria del cannocchiale, controllare e accertarsi sempre che l'arma da fuoco sia scarica.

ASSISTENZA LEUPOLD

Se il cannocchiale di mira Leupold Golden Ring non funziona in qualsiasi modo, lo si può restituire direttamente alla fabbrica (o a uno dei centri internazionali di assistenza Leupold) per la riparazione. Non è necessario rivolgersi al rivenditore per spedirlo alla Leupold, però lo si può contattare per determinare se è necessaria l'assistenza della fabbrica. Istruzioni per la spedizione:

1. Togliere i collari ed eventuali altri accessori dal cannocchiale.
2. Annotare e conservare il numero di serie del cannocchiale.
3. Allegare un foglio su cui siano scritti il proprio nome e cognome, indirizzo, numero di telefono, eventuale indirizzo di posta elettronica e la descrizione del problema.
4. Imballare il cannocchiale nella scatola originale (se la si è conservata) perché è il contenitore di spedizione più sicuro. Proteggere bene il pacco avvolgendo la parte esterna con del nastro adesivo dotato di fili di rinforzo.
5. Spedire il cannocchiale usando un corriere o il servizio postale (se possibile, assicurare la spedizione) a uno dei seguenti indirizzi:

Negli Stati Uniti:

Se si usa un corriere:

Leupold Product Service 14400 NW Greenbrier Parkway

Beaverton, OR 97006-5790 USA

Se si usa il servizio postale:
Leupold Product Service P.O. Box 688
Beaverton, OR 97075-0688 USA

Fuori degli USA:

Canada: Korth Group Ltd., 103 Stockton Point, Box 490
Okotoks, AB T1S 1A7, Canada

Germania: Harold Ros, Coburger Strasse 71, 98673 Eisfeld, Germania

Svezia: HDF Gyttorp Jakt AB, Svarvaregatan 5, S-302 50 Halmstad, Svezia

Il numero telefonico del servizio assistenza negli USA è **+1(503) 526-1400** oppure la linea verde **(800) 538-7653**. Si può contattare il servizio di assistenza anche tramite fax al numero **+1(503) 352-7621** o tramite internet presso il sito **www.leupold.com**.

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